Group name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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This project is designed to further your understanding of our place value system. In this project you will be required to build a place value creation with random objects found in the room or brought in from home. This will be completed in class with a group of your peers each contributing an equal amount. The project will consist of these 4 areas.

1. Number
   1. On the creation you will design a code system to create a 7-10 digit number
   2. You must have a different object for each place value in your number.
   3. Place a “key” on your creation for others to figure out your code.
   4. For example: you may use bottle caps to represent the tens place. You decide to put 8 on your creation so you have the number 80.
2. Patterns
   1. After you have your 7-10 digit number you need to find 5 ways to represent its patterns.
   2. For example: The number 520 could be represented as 52 tens.
   3. Record those patterns.
3. Rounding
   1. Choose 5 place values to round your 7-10 digit number to.
   2. Record those numbers.
4. Place value
   1. After creating your 7-10 digit number, record your number in standard, expanded, and word form.

Group name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group members: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| --- | --- | --- | --- | --- |
|  | **4** | **3** | **2** | **1** |
| **Creativity** | * Creatively designed & put together * Original idea * Used 5 or more colors | * Creatively designed * Use 3-4 colors | * Little thought in design * Used little color | * Un readable design * No color |
| **Number creation** | * The number is 9-10 Digits * Extremely Sturdy * Exceptional quality | * The number is 7-8 Digits * Sturdy creation * Good quality | * The number is 5-6 Digits * Unstrudy creation * Lacking quality | * The number is 3-4 Digits * Creation is falling apart * No quality |
| **Patterns** | * 5 or more patterns that were all written correctly. | * 4 or more patterns with 4 patterns written correctly. | * 3 or more patterns with 3 patterns written correctly. | * 2 or more patterns with 2 patterns written correctly. |
| **Rounding** | * 5 or more place values were chosen and correctly rounded | * 4 place values were chosen and correctly rounded | * 3 place values were chosen and correctly rounded | * 2 or fewer place values were chosen and correctly rounded |
| **Place Value** | * The number was written correctly and organized appropriately in all 3 ways | * The number was written correctly in all 3 ways. | * The number was written correctly in 2 ways | * The number was written correctly in 1 or fewer ways |

Score: \_\_\_\_\_\_\_\_\_\_\_\_\_